

AMLINSKIY, Il'ya Yefimovich

(Moscow Medical Stomatological Inst), Academic degree of Doctor of Biological Sciences, based on his defense, 28 April 1955, in the Council of the Inst of Morphology of Animals imeni Severtsov, c<sup>o</sup> his dissertation entitled: "Geoffroy Saint-Hilaire (teaching of the unity and the evolution of the animal world)."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 17, 9 July 1955, Byulleten' MVO SSR, No. 17, Sept 1956, Moscow, pp 9-16, Uncl. JPRS/NY-435

AMLINSKIY, I.Ye.

Initial stage of the development of the method of homologies and its role in the reform of comparative anatomy and taxonomy of vertebrates. Trudy Inst. ist. est. i tekhn. 36:286-293 '61.  
(MIRA 14:9)

(Anatomy, Comparative)

AMLINSKIY, I.Ye.

"Development of general biological problems in Russia; the first half of the 19th century" by I.E.Mikulinskii. Reviewed by I.E. Amlinskii. Zhur. ob.biol. 23 no.5:396-400 S-0'62. (MIRA 16:6)  
(BIOLOGY)

MECHNIKOV, Il'ya Il'ich; AMLINSKIY, I.Ye., prof., red.

[Studies in optimism. Translated from the French]  
Etudy optimizma. Moskva, Nauka, 1964. 338 p.  
(MIRA 18:2)

BRAGINSKIY, M.A., inzh.; METS, M.M., inzh.; GURNOVICH, A.V., inzh.; ZREZARTSEV,  
N.P., inzh.; AMLINSKIY, L.Z., inzh.

Modernization of the PM-3 machine for area measurements. Nauch.-  
issl.trudy Ukr NIIKP no.13:77-88 '62.

(MIRA 18:2)

AMLINSKIY, Ya.A.

Repair fast and reliably. Metallurg 10 no.9:34-35 8 '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut organizatsii  
proizvodstva i truda chernoy metallurgii.

~~AMLINSKIY, Yakov Abramovich; GRENIS, P.S., red.; VAGIN, A.A., red.izd-vs;~~  
~~DOBUZHINSKAYA, L.V., tekhn.red.~~

[Repair of wire-drawing equipment] Remont volochil'nogo oborudovaniia.  
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i svetnoi metal-  
lurgii, 1958. 163 p. (MIRA 11:7)  
(Wire drawing--Equipment and supplies)

MR. HARRY, Y.S.A.

Effect: organization of the repair of equipment in metallurgical enterprises. Metall. gorn. rad. prom. no. 6267-69 II-5 '63.

(MIRA 18:1)

L 35953-66

ACC NR: AP6027354

SOURCE CODE: UR/0102/66/000/002/0065/0070

AUTHOR: Am'ins'kyy, L. Z.--Amlinskiy, L. Z. (Kiev)

71

ORG: none

B

TITLE: Ultra-acoustic method of analyzing crystal-containing compositions and the automation of sugar crystallization processes

SOURCE: Avtomatyka, no. 2, 1966, 65-70

TOPIC TAGS: automation, crystallization, food technology, acoustic analysis, acoustic absorption, ultrasonic vibration, gravimetric analysis, automatic control technology

ABSTRACT: The article describes an ultra-acoustic method of analyzing crystal-containing batch as part of the automation of the process of the continuous cooking of massecuite in beet sugar production. The quantitative relations between the principal physico-chemical parameters of the medium, (concentration, temperature, etc.) determining the absorption of ultrasonic energy are presented. The dependence of acoustic properties on the principal indicators of the quality of massecuite is confirmed. An ultrasonic massecuite analyzer is described. This analyzer makes it possible to measure the absorption factor and relative variation in the rate of ultrasonic vibrations as a function of the variation in the concentration and gravimetric content of the crystals; it is designed for the analysis and automatic control of parameters of the medium in the process of the continuous cooking of massecuite. The author thanks Engr. Yu.A. Lanshin, V.K. Leydel and S.F. Morozov. Orig. art. has: 3 figures and 34 tables [JPRS]

SUB CODE: 09,20,06 / SUBM DATE: 10Jul65 / ORIG REF: 008 / OTH REF:009

Card 1/1

0977

01180

AMM, Gerhardt, polkovnik

On guard of peace. Komm. Vooruzh. Sil. 46 no.8:68-70 Ap '65.  
(MIRA 18:6)

AMMANUILOVA, Yem.

SOV/2213

## PHASE I BOOK EXPLOITATION

11 (2, 4)

Groznyy. Neftynoy nauchno-issledovatel'skiy institut

Groznyy. Tekhnologiya pererabotki nefti i gaza (Chemistry and Technology of Petroleum and Gas Refining Processes, Moscow, Gosstoptekhnizdat, 1959. 278 p. (Series: Iti: Trudy, vyp. 4) 2,500 copies printed.

Executive Ed.: T.D. Yefremov; Tech. Ed.: A.S. Polzinim; Editorial Board: A.Z. Dorogohinskiy (Chairman), B.K. Aserik, G.I. Mat'vin, M.M. Karklin, V.I. Lavrent'yev, Ye.S. Levchenko, and M.G. Mitrofanov (Deputy Chairman).

PURPOSE: This book is intended for petroleum engineers and technicians in scientific research institutes, planning organizations, and refineries.

COVERAGE: This collection of technical papers on oil and gas refining were originally discussed at the Petrochem Refining section of the Third Grozny Scientific-Technical Conference in 1957. The articles have been published to help further the development of the petroleum

refining industry and petrochemical industry in the Chechen-Ingush Autonomous Republic of the Grozny region. The book contains technical information with emphasis on the interdependence of the refining and the aircraft, automobile and rocket manufacturing industries. Change in modern engines demand a change in the lubricating oil properties. The increased use of jet engines makes the production of high octane aviation grade aviation kerosene, the yield of which requires a quite different refinery run. Since crudes recovered at the Kumbak-Achaluki fields represent a valuable raw material for manufacturing lubricating oil and paraffin wax, their properties have been thoroughly investigated and results of the investigations are given. The re-equipment of the fuel processing plants at Groznyy has been carried out on the basis of findings obtained from tests and pilot plant operations. Tests were made of reforming and platforming units at Groznyy. Tests were made of the low octane gasoline products with a view to determining the destructive distillation of residues which yields solar fractions badly needed for catalytic cracking unit as feed stock. Catalytic cracking units of the 43-102 type were first put on stream in the Groznyy refineries in 1952, and since that time continuous efforts have been made to boost their processing capacity, and improve the regeneration of catalysts. The authors make a number of suggestions as to the improvement of the above units might be increased. The production of different types of pelleted and beaded catalysts, the contamination of catalysts and their reactivation are discussed. The operation of a contact coking reactor is described. The authors also deal with the manufacture of lubricating oil, paraffin and ceresine wax and indicate ways of improving their properties. Electrical denaturation and salting of crude oil and of light products are discussed. The authors state that in recent years extensive studies have been made on the chemical conversion of petroleum products. In particular, compressors were built and installed on the Groznyy refinery. The authors also discuss the synthesis of ethyl alcohol and acetone from propylene and benzene, to synthesize ethyl alcohol and oxidize paraffinic hydrocarbons. An article is devoted to problems of automating various processes and developing the related control and gauge instruments. The book contains numerous tables with the characteristics of different petroleum products obtained from refinery processing. The pilot plants and petrochemical refinery sections. Each article is accompanied by references.

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contains numerous items with the characteristics of different petroleum products obtained from refinery processing units, pilot plants and petrochemical refinery sections. Each article is accompanied by references.

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contains numerous tables, in characterizations of different petroleum products obtained from refinery processing units, plants and petrochemical refinery sections. Each article is accompanied by references.

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GAL'CHENKO, G.I.; AMMAR, M.M.; SKURATOV, S.M.; BUBNOV, Yu.N.; MIKHAYLOV, B.M.

Heats of formation of n-tributyl borate and di-n-butylboronic acid  
anhydride. Vest. Mosk. un. Ser. 2: Khim. 20 no.2:3-8 Mr-Apr '65.  
(MIRA 18:7)

1. Laboratoriya termokhimii Moskovskogo gosudarstvennogo universiteta  
i Institut organicheskoy khimii AN SSSR.

YANUSHENKO, G.I.; ZHARIN, M.M.; SERGAYEV, S.N.; RUBINA, M.M.; RYKOVA, E.M.

Reaction of formation of dihydroxydiaziridine and  
dihydroxydiaziridine. Vestn. Mosk. univ. Ser. Khim. (MIRA 18:3)  
20 no. 3:13-14. Moscow, U.S.S.R.

I. Mankovskiy universitet, Zheleznaya Gorka Khimicheskoye Institut  
organicheskoy khimii AN SSSR imeni Zeldinskogo.

CHECINSKI, Tadeusz; AMMER, Danuta

A case of acrodermatitis enteropathica with a favorable outcome.  
Przegl. dermat. 49 no.3:219-226 '62.

1. Z oddziału dermatologicznego szpitala im. E. Sonenberga w Łodzi.  
Ordynator: dr med. T. Checinski Kierownik naukowy oddziałów  
dermatologicznych Szpitala: prof. dr M. Mienicki.  
(ACRODERMATITIS)

AMMER, K. (Stara Tura); RIHA, L. (Stara Tura)

Fifteen years of medical apparatus production in the national  
enterprise Proana mechanika, Stara Tura. Jemna tech opt 5 no.7:  
207-208 JJ '60.

L 63976-65 EWA(c)/EWI(m)/ENP(b)/T/EWA(d)/EPP(e)/ENP(w)/ENP(t) JD  
 UR/01:8/65/000/005/0140/0144  
 ACCESSION NR: AP5013326 548.0:539

AUTHOR: Postnikov, V. S.; ~~Ammer, S. A.~~  
 74,55 74,55

TITLE: Elastic moduli and strength of metal whiskers  
 74,55

SOURCE: IVUZ. Chernaya metallurgiya, no. 5, 1965, 140-144

TOPIC TAGS: crystallography, metal whisker, copper, metal physical property, metal mechanical property  
 17 18

ABSTRACT: X ray analysis shows that copper whiskers may have three crystallographic orientations for the longitudinal axis ([111], [100] and [110]) with corresponding variations in the geometry of the cross sections. Whiskers with their axis parallel to direction [111] are hexagonal in cross section, those with orientation [100] are square, and when the orientation is [110] the whisker has a rectangular cross section. This close relationship between the orientation of the crystals and the shape of their cross section makes it possible to determine the direction of the longitudinal axis by microscopic study of the cross section of the crystal, without resorting to x ray analysis. On this basis, the authors studied the strength and

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43  
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APPROVED FOR RELEASE: 03/20/2001  
 ACCESSION NO. AP6013326

elastic moduli of copper whiskers as a function of orientation. Smooth elastic whiskers were chosen without visible surface defects at 500x magnification under an MIM-7 microscope. The specimens were 2-3 mm long with a cross sectional area of 2.3-70  $\mu^2$ . The breaking point of the crystals was determined, i.e. the maximum stress which the crystal could sustain before destruction. Twenty square and twenty-one hexagonal crystals were measured at room temperature (see fig. 1 of the Enclosure). The shear modulus was defined as the square of the frequency of the normal torsional mode of the specimen:

$$G = \frac{8\pi I}{R^4} f^2$$

where  $I$  is the moment of inertia of the torsionally oscillating system;  $L$  and  $R$  are the length and radius of the specimen; and  $f$  is the oscillation frequency. The measurements were made in a vacuum of the order of  $10^{-3}$  mm Hg. The shear modulus measurements were done on crystals with cross sections ranging from 40 to 100  $\mu^2$ . The frequency of the torsional oscillations was of the order of 1 cps. The maximum shearing stress did not exceed 10 g/mm<sup>2</sup>. The radius  $R$  is usually defined for whiskers as  $\sqrt{S}$  where  $S$  is the area of the cross section. The results of tests on 28

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3

square and 23 hexagonal whiskers are shown in fig. 1 of the Enclosure. These data confirm the generally accepted relationship between the breaking point and cross section of whiskers. The thinnest crystals have the highest strength, close to theoretical. Their breaking point is ten times that of ordinary copper single crystals. Surface defects are responsible for the scatter in the data. The average breaking point of square whiskers in the 2.3-10  $\mu^2$  range is about  $\frac{1}{2}$  that of hexagonal whiskers in the same range (63 kg/mm<sup>2</sup> compared with 128 kg/mm<sup>2</sup>). This shows that the modulus of elasticity in whiskers depends on the orientation of the longitudinal axis. Orig. art. has: 2 figures.

ASSOCIATION: Voznezhskiy politekhnicheskij institut (Voronezh Politechnic Institute)

SUBMITTED: 31Aug64

ENCL: 01

SUB CODE: NM, SS

NO REF SOV: 007

OTRER: 002

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ACCESSION NR: AP5013326

ENCLOSURE: 01

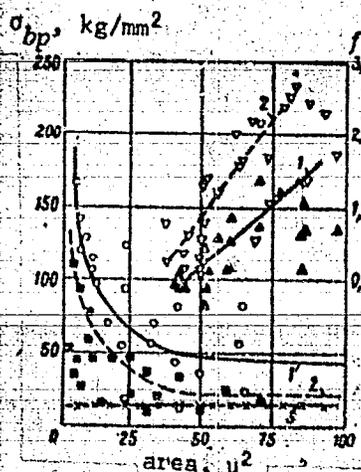


Fig. 1. Breaking point and  $f^2$  of the normal torsional mode as functions of the dimensions and shape of the cross section in copper whiskers:  
1--(○, △)--orientation [111];  
2--(□, ◇)--[100]; 3--strength of ordinary copper single crystals.

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L 2253-85 EWT(m)/EWT(w)/EWA(d)/T/EWP(t)/EWP(i) JP(c) JD

ACCESSION NR: AP5006333

8/0126/65/019/002/0268/0273

AUTHOR: Postnikov, V. B.; Ammer, S. A.; Belyayev, A. M.

TITLE: Internal friction, shear modulus, and strength of copper whiskers

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 2, 1965, 258-273

TOPIC TAGS: copper whisker, whisker internal friction, whisker shear modulus, whisker strength, temperature dependence

ABSTRACT: The temperature dependence of the internal friction and shear modulus of copper whiskers 6-10 mm long, 3-10  $\mu$  in diameter, and with a 23-150- $\mu^2$  cross section has been investigated by means of a low-frequency torsion micro-pendulum in a vacuum of 2-5 $\cdot$ 10<sup>-5</sup> mm Hg at temperatures ranging from 20 to 800C. The room temperature tensile strength of the whiskers varied from 17 to 121 kg/mm<sup>2</sup> depending on the cross section. The internal friction was practically independent of temperature in the 20-400C range and was comparable in magnitude to that of ordinary copper single crystals, but sharply increased in the 600-650C range. A small peak was observed at 430C; 2-hr annealing at 650C had no effect on its magnitude or position, and its nature was not determined. The twin-whiskers had

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ACCESSION NR: AP5006333

an appreciable peak at 530—5800, probably caused by the interface between two crystals. The shear modulus decreased quite sharply with increasing temperature. Orig. art. has: 5 figures and 1 table. [MS]

ASSOCIATION: Voronezhskiy politekhnicheskiy institut (Voronezh Politechnic Institute)

SUBMITTED: 28Feb64

ENCL: 00

SUB CODE: SS, MM

NO REF SOV: 012

OTHER: 007

ATD PRESS: 3204

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L 6990-66 INT(m)/EWA(c)/EWP(b)/T/EWP(t) IJP(s) DJ/JD

ACC NR: AP5017336

SOURCE CODE: UR/0181/65/007/007/2242/2244

AUTHOR: Armer, S. A.; Kosilov, A. T.; Postnikov, V. S.

52  
98

ORG: Voronezh Polytechnical Institute (Voronezhskiy politekhnicheskii Institut) B

TITLE: Internal friction and filament strength of Cu crystals

SOURCE: Fizika tverdogo tela, v. 7, no. 7, 1965, 2242-2244

TOPIC TAGS: copper whisker, annealing, crystal dislocation, internal friction, torsional vibration

ABSTRACT: The influence of cross-section area of filamentary Cu crystals on strength and internal friction was studied. For this work, high purity Cu whiskers were grown by Brenner's method [S. S. Brenner, Acta Met., 4, 62, 1956], i.e., the hydrogen reduction of gaseous Cu salts at 560-570°C. The experimental samples had both very smooth and roughened surfaces. Internal friction tests were conducted at room temperature in a vacuum ( $2 \cdot 10^{-5}$  mm Hg). The axial stress on the Cu whiskers of 5 micron diameter never exceeded 100 g/mm<sup>2</sup>. The data is presented in fig. 1. The figure shows significant scattering, it places the dependence of  $Q^{-1}$  and  $\sigma$  on diameter. Above about 20 microns, the internal friction has a value approaching that of ordinary single crystals; below 10 microns, the lowering of the internal friction is characterized by large increases in strength. These facts are correlated with disloca-

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tion behavior, as evidenced by experiments with filaments having roughened surfaces.

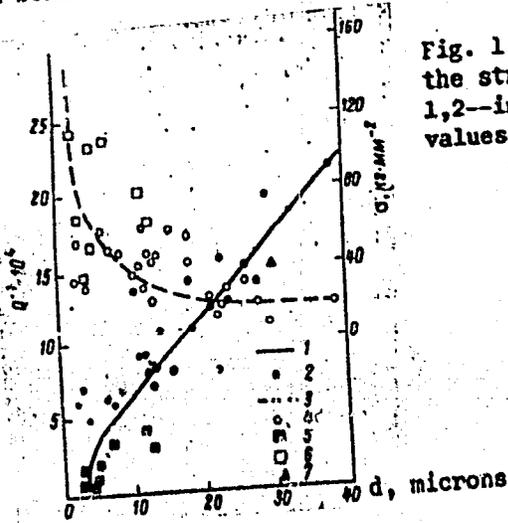


Fig. 1. Dependence of internal friction  $Q^{-1}$  and the strength  $\sigma$  of Cu whiskers for varying diameters. 1,2--internal friction; 3,4--strength; 5--minimum values of internal friction; 6--characteristic strength; 7--Schurer's data.

These samples had low strengths but retained their low values of  $Q^{-1}$ . The explana-

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tion offered is based on the different behaviors of surface and volume dislocations; surface dislocations are extremely effective in lowering strength, while volume dislocations affect  $Q^{-1}$  by raising it. This was demonstrated by testing cold worked filaments of 4.8 microns diameter. The internal friction increased about 20 times, showing the effects of volume dislocations, i.e.  $Q^{-1}$  was raised while  $\sigma$  remained constant. By annealing these same samples,  $Q^{-1}$  was almost fully restored; the annealing schedule used was 700°C for one hour. The effects of the annealing are explained by dislocation locking by impurities, or to the annihilation of dislocations formed during cold working. In closing, the authors mention the influence of lowering the degree of vacuum on  $Q^{-1}$ ; changing the vacuum pressure from  $2 \cdot 10^{-5}$  mm Hg to  $10^{-3}$  mm Hg increased  $Q^{-1}$  by as much as 10 times. Also, the technique of clamping the samples affected the value of  $Q^{-1}$ . Orig. art. has: 1 figure.

SUB CODE: MM/      SUBM DATE: 03Feb65/      ORIG REF: 006/      OTH REF: 007

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L 23026-66 ENT(1)/ENT(m)/I/EMP(t) IJP(c) JD/WM/GG  
ACC NR: AP6009662 SOURCE CODE: UR/0181/66/008/003/0792/0796

AUTHORS: Ammer, S. A.; Belikov, A. M.; Kosilov, A. T.; Postnikov, V. S. 59

ORG: Voronezh Polytechnic Institute (Voronezhskiy politekhnicheskii Institut)

TITLE: Features of the structure of copper-iron and copper-nickel filamentary crystals 27 27 27

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 792-795

TOPIC TAGS: fiber crystal, copper, hardness, crystal structure, x ray study, metallographic examination, single crystal, metal whisker

ABSTRACT: The main purpose of the investigation was to determine the reasons for the observed large microhardness of the transition layer of copper-iron whiskers, and to obtain other data on the fine structure of such whiskers. The whiskers were grown from mixtures of chloride salts of the corresponding metals in a hydrogen atmosphere by the method of T. S. Ke (Scientia sinica v. 10, 301, 1961). The 27 2

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ACC NR: AP6009662

grown whiskers had a complicated structure,<sup>13</sup> consisting of a single-crystal core-rod surrounded by a polycrystalline envelope, which was thicker at the base of the whisker and narrower at its tip. Some whisker tips had no envelope at all. X-ray structural analysis and metallography were used to investigate the structure. At envelope thickness up to 50  $\mu$ , the Debye rings of the x-ray rotation patterns showed a clearly pronounced texture. Regardless of the orientation of the central copper rod, the iron crystals of the envelope glowed on it in accordance with the principle of structural and dimensional correspondence. The copper-nickel whiskers were solid-solution single crystals containing up to 7% nickel in the copper. The concentration in the nickel was higher in the surface layer of the whiskers than in the deeper ones. This structure is related to the growth conditions and also determines some of the whisker properties. It is concluded that the differences between whiskers and ordinary single crystals are due precisely to the differences in the growth conditions. Orig. art. has: 2 figures and 1 table. 2

SUB CODE: 20/ SUBM DATE: 24Jul65/ ORIG REF: 005/ OTH REF: 006

Card 2/2 LC

I 43958-06 EWP(e)/EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(s) JD/GD

ACC NR: AT6026907

SOURCE CODE: UR/0000/66/000/000/0045/0050

AUTHOR: Ammer, S. A.; Kosilov, A. T.; Postnikov, V. S. (Professor; Doctor of physico-mathematical sciences)

51  
49  
B41

ORG: none

TITLE: Effect of size, impurities and deformation on the internal friction and strength characteristics of whiskers

SOURCE: AN SSSR. Institut metallurgii. Vnutrenneye treniye v metallakh i splavakh (Internal friction in metals and alloys). Moscow, Izd-vo Nauka, 1966, 45-50

TOPIC TAGS: copper whisker, copper iron whisker, ~~whisker~~ shear modulus, whisker, internal friction, ~~whisker strength~~

metal

ABSTRACT: The internal friction and tensile strength of pure copper and copper-iron whiskers has been investigated in a vacuum of  $2 \cdot 10^{-5}$  mm Hg at room temperature. The internal friction of copper whiskers increased continuously with increasing whisker diameter (see Fig. 1), while the tensile strength continuously decreased. The internal friction of pure copper whiskers was found to be very sensitive to strain hardening. For instance, the internal friction of a whisker strained to the stage of light slip was 20 times higher than that of unstrained whiskers, but it was restored to the original level by annealing at 700C for 1 hr. Iron increases the internal

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L 36984-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/T/EWP(l)/EWP(v)/EWP(t)/ETI IJP(c)

ACC NR: AP6012222 JD SOURCE CODE: UR/0032/66/032/004/0492/0493

AUTHOR: Postnikov, V. S.; Kosilov, A. T., Ammer, S. A.

50  
B

ORG: Voronezh Polytechnic Institute (Voronezhskiy politekhnicheskiy institut)

TITLE: Apparatus for the study of internal friction and the modulus of elasticity of whisker crystals by the method of bending vibrations

SOURCE: Zavodskaya laboratoriya, v. 32, no. 4, 1966, 492-493

TOPIC TAGS: metal whisker, internal friction, elastic modulus, vibration stress

ABSTRACT: The apparatus described in the article makes it possible to study whiskers up to 40 mm long with a diameter from 5 to 150 microns, over a frequency range from 30 to 800 cycles, at temperatures from -190 to +600°C, in a vacuum of the order of 10<sup>-5</sup> mm Hg. The article gives a detailed block diagram of the apparatus and also a diagram of the construction of the sensing device. The apparatus has been used in practice to measure the internal friction of copper whiskers of various diameters at room temperatures; the value was of the order of 10<sup>-3</sup>. Orig. art. has: 2 figures.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 002

Card 1/1

UDC: 620.174.22.105

L 56 09-86 IMP(M)/EMP(M)/T/EMP(L)/ETL INT(c) JD  
ACC NR: AP6017209 (A, N) SOURCE CODE: UR/0126/66/021/005/0770/0773

AUTHORS: Postnikov, V. S.; Amosov, S. A.; Kosilov, A. T.; Bolikov, A. M.

40  
3

ORG: Voronezh Polytechnic Institute (Voronezhskiy polytekhnicheskii institut)

TITLE: Relaxation properties of copper-iron thread-like crystals

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 5, 1966, 770-773

TOPIC TAGS: copper containing alloy, iron containing alloy, metal crystal, metal whisker, copper whisker

ABSTRACT: The inner friction,<sup>4</sup> shear modulus, electrical resistance, and crystal structure of copper-iron crystal whiskers were studied. The whiskers were obtained after the method of P. S. Ke and Y. K. Wan (Scientia Sinica, 1961, 10, 3, 301). The experimental results are shown graphically (see Fig. 1). The curve of inner friction vs temperature exhibited a peak in the region of 400--500C. It is concluded that the iron-copper whiskers represent a supersaturated solid solution.<sup>6</sup> The energy of activation for the decomposition of the supersaturated solution as determined by the method of V. S. Postnikov (DAN SSSR, 1953, 91, 79) was 30 kcal/mole.

Card 1/2

UDC: 539.292;538.539.67

I. 36109-66

ACC NR: AP6017309

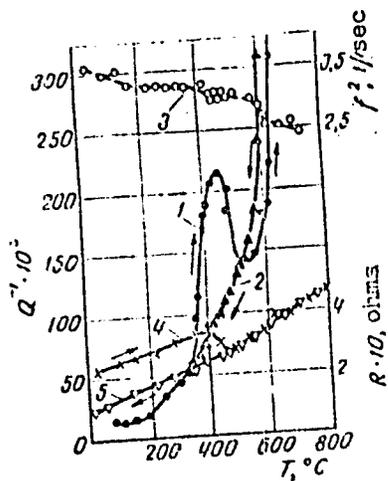


Fig. 1. Temperature dependence of inner friction  $Q^{-1}$ , shear modulus  $G$ , and electrical resistance  $R$  of copper-iron whiskers: 1 -  $Q^{-1}$  for slow rate of heating of specimen; 2 - the same for slow cooling; 3 -  $G$  for heating; 4 -  $R$  for heating; 5 - the same for cooling at a rate of 2.5 degrees/min.

Orig. art. has: 4 figures.

SUB CODE: 11/20/

SUBM DATE: 04May65/

ORIG REF: 007/

OTH REF: 004

LS

Card 2/2

ACC NR: AP7005350

and after removal of the external load, the dislocations move from the surface back to their original sources, intersect, and form a stable structure at room temperature. The results agree with this simple mechanism, but it is pointed out that various types of crossings of both screw and edge dislocations and various manners by which they can emerge to the surface can affect this picture. Orig. art. has: 3 figures and 6 formulas.

SUB CODE: 20/    SUBM DATE: 22Jun66/    OTH REF: 007

Card 2/2

AMMON, K. L., Engr. Cand. Tech. Sci.

Dissertation: "Methods for Examination of the Finish of Machined Surfaces. Moscow  
Automotive Mechanics Inst, 19 Jun 47.

SO: Vechernyaya Moskva, Jun, 1947 (Project #17836)

OK

AMMON, K.L.

Otsenka i issledovanie chistoty obrabotannykh poverkhnostie. Moskva, Oborongiz, 1950. 128 p. illus.

Bibliography: p. 128-(129).

Testing and examining the cleanliness of finished surfaces.

DLC: TA407.A54

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

AMNON, X.L., kandidat tekhnicheskikh nauk

Determination of the surface smoothness of spinning machine parts.  
[Izd.] IONITOMASH no. 34:266-280 '54. (MLRA 8:10)

1. NIITekmash

(Surfaces (Technology))

AMMOREYSKAYA, A.I.

KHOTSYANOV, Lev Kipriyanovich; AMMOREYSKAYA, Alexandra Ivanovna; LAVROV, A.A., redaktor; ROMANOVA, Z.A., tekhnicheskiy redaktor

[Methodological instructions on the keeping of records, establishing statistics and analysing morbidity with temporary disability] Metodicheskie ukazaniya po provedeniiu ucheta, razrabotki i analiza zabolevaemosti s vremennoi utratoi trudosposobnosti. Moskva, Gos. izd-vo med. lit-ry, 1954. 63 p. (MLRA 8:3)

(Absenteeism (Labor)) (Medical statistics)

ZHUKOVSKIY, Mikhail Aleksandrovich; ZHDANOV, Viktor Mikhaylovich;  
MOLCHANOVA, Ol'ga Pavlovna; KOSILOV, Sergey Aleksandrovich,  
prof. fiziolog; KHOTSYANOV, Lev Kuprianovich; AMOREYSKAYA, A.I.

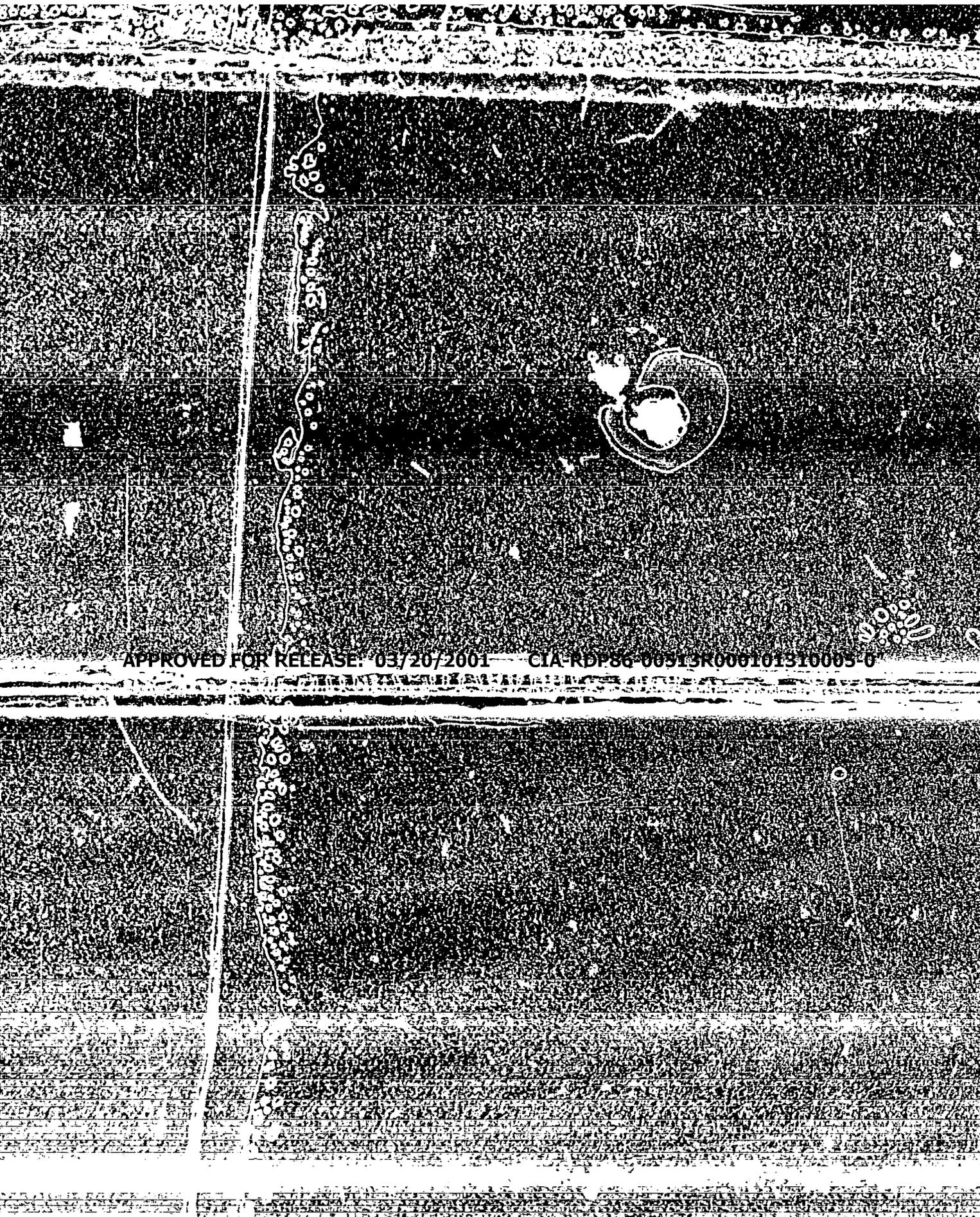
Health and the way of life. Nauka i zhizn' 25 no.7:7-12 J1 '58.  
(MIRA 11:9)

1. Uchenyy sekretar' Nauchno-planovoy komissii Prezidiuma  
AMN SSSR (for Zhukovskiy). 2. Chleny-korrespondenty AMN SSSR (for  
Zhdanov, Molchanova, Khotsyanov). 3. Direktor Instituta pitaniya  
AMN SSSR (for Molchanova).

(MEDICINE--CONGRESSES) (HYGIENE)

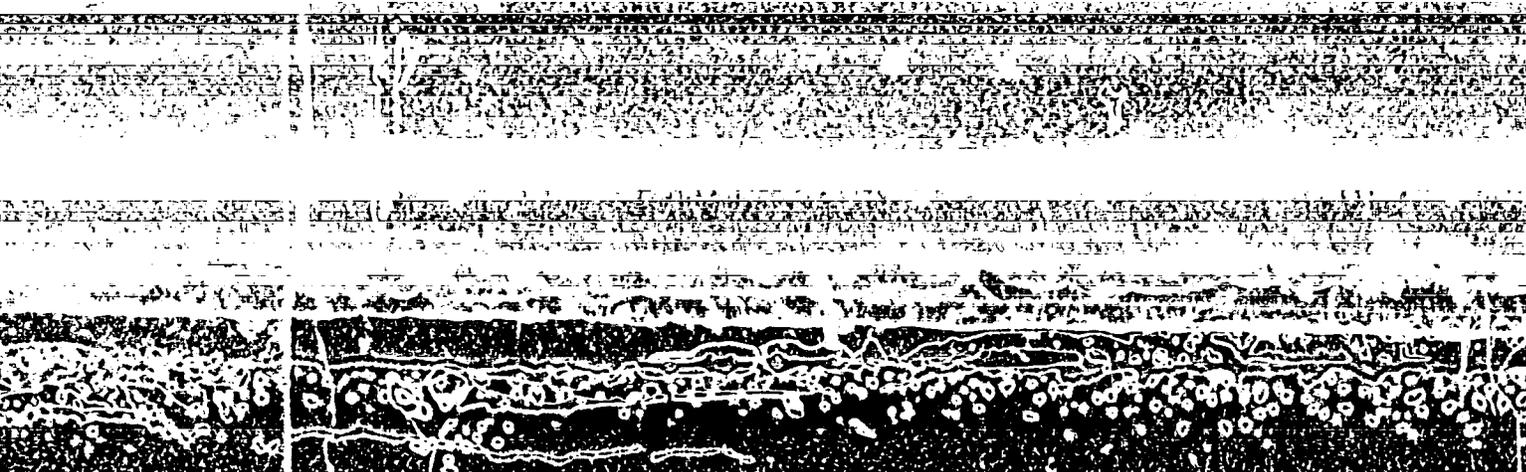
VERESKUNOV, Vadim Konstantinovich; AFANAS'YEV, Nikolay Anant'yevich;  
AMMOV, F.A., red.; MYAKUSHKO, V.P., red.izd-va; KARLOVA, G.L.,  
tekh. red.

[Worker's guide on fire prevention] Rabochemu o pozharnoi  
bezopasnosti. Moskva, Goslesbumizdat, 1963. 62 p. (MIRA 16:6)  
(Woodworking industries--Fires and fire prevention)



"APPROVED FOR RELEASE: 03/20/2001

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APPROVED FOR RELEASE: 03/20/2001

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APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000101310005-0"

VERESKUNOV, Vadim Konstantinovich; AFANAS'YEV, Nikolay Arsent'yevich;  
AMMOV, F.A., red.; MYAKUSHKO, V.P., red.isd-va; KARLOVA, G.L.,  
tekh. red.

[Worker's guide on fire prevention] Rabochemu o pozharnoi  
bezopasnosti. Moskva, Goslesbumizdat, 1963. 62 p. (MIRA 16:6)  
(Woodworking industries--Fires and fire prevention)

DRUZ', Ivan Andreyevich; AMOSOV, F.A., nauchn. red.

[Fire-prevention instructions and the required minimum  
of technical knowledge for workers and employees] Pro-  
tivopozharnyi instryktazh i tekhnimum s rabochimi i  
sluzhashchimi. Moskva, Stroiizdat, 1964. 69 p.  
(MIRA 17:12)

AMOSOV, I. I.

"Method of Compiling Zonal Charts of Coal Metamorphism," Report I, Iz. Ak.  
Nauk SSSR, Otdel. Tekh. Nauk, Nos. 10-11, 1944

Lab. of Origin and Chemistry of Coal, Inst. Mineral Fuels, AS USSR

И. И. Иванов, Инокентий Иванович. О генезисе угля Ленинского месторождения  
Кубасса; под ред. Н.М. Каравеева. Москв., 1945. 42.п. (Академия Наук  
Союза ССР. Отделение технических наук. Институт геотехнических наук.).  
DLC: TN808.R9A6

SO: IC, Soviet Geography, Part I, 1951, uncl.

1ST AND 2ND ORDERS      3RD AND 4TH ORDERS

EMPIOSOV, I.I.      PROCESSES AND PROPERTIES INDEX      21

ca

New method of determination of the enrichability of coals by their genetic nature. I. I. Ammasov. *Bull. acad. sci. U.R.S.S., Classe sci. tech.* 1946: 1775-80 (in Russian). -- Since the ash content and its distribution depend on the geological genesis of the coal seam, it is possible to gain advance knowledge of the enrichability of a given coal from its compn. according to petrographic type, previously sorted out for the given site and characterized. The expected ash content and yield in enrichment products are obtained by graphic construction of the compn. by types against the characteristics of the type standards; e.g., for an autochthonically formed seam, composed of 60% glossy and near half-glossy types with ash content of 2.78%, 40.5% half-glossy of a 2.25, 6% half-dull granular of a 4.25, 45% half-dull dense of a 2.75, and 2% layers of a 14.4%, the expected yield in concentrate is 98% with a = 33.5%.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS      COMMON ELEMENTS

COMMON ELEMENTS

COMMON ELEMENTS

AMMOV, I. I.

PA 14741

USSR/Coal  
Fuels, Solid

Dec 1946

"Genesis of Coals and Their Concentration: A New Method of Determining the Concentration of Fossil Coals," J. J. Ammosev, 12 pp

"Izv Ak Nauk Otd Tekh" No 12

Discusses the various forms of coal, with many illustrations. Concludes that further study along this line would be of great advantage to coal mining.

14741

AMMASAV, I.L.

ca

Estimation the capability of mine coal to be beneficiated.  
 I. L. Ammasav. U.S.G.R. 09,202, Sept. 30, 1947. The  
 method consists of the detn. of the petrographic type of  
 coal in a given seam and the av. ash content of each type.  
 On these data is based the estn. of beneficiation capacity of  
 the coal. M. Hirsch

21

ASD-51.4 METALLURGICAL LITERATURE CLASSIFICATION

CLASSIFICATION	SEARCHED	INDEXED	SERIALIZED	FILED
U S G R A S D 5 1 4	U S G R A S D 5 1 4	U S G R A S D 5 1 4	U S G R A S D 5 1 4	U S G R A S D 5 1 4

АММОСОВ, И. И. Dr. Geolo-Mineralog. Sci.

Dissertation: "Influence of Geological Factors on the Properties of Coals." Inst. of Mineral Fuels, Acad. Sci. USSR. 24 Apr 47.

SC: Vechernyaya Moskva, Apr, 1947 (Project #17030)

AMMOV, I.I.

Contents and methods of compiling geological and coal chemistry  
maps. Trudy Inst.geol.nauk. no.90:213-224 '47. (MLRA 9:11)  
(Coal geology--Maps)

62  
Heavy medium separation of fossil coals as means for their study. I. I. Anisimov. Doklady Akad. Nauk S. S. R. 13, 797-801 (1960). Coal-setting org. liquids of varying sp. grs. were used for the sepn., and the fractions obtained were studied petrographically, chemically, and physicochemically. The coal was first powdered in a ball mill or in a porcelain mortar to pass through a 0.1-in. screen; 66-80% was less than 42  $\mu$  in size; 18-30% was 85-230  $\mu$ . Eight mixts. of  $CCl_4$  and benzene were used with sp. gr. varying between 1.40 and 1.24. The sep. was repeated until the lighter fraction in the liquid amounted to not over 3% by weight. Analysis of the fractions failed to disclose any effect of the solvent upon the compn. of the coal, but the medium contd. 0.001-0.1% by wt. of the coal. The lighter fractions are higher in spore content, cuticle, and gums, and lower in fusain. The vitrinite content increases with a drop in the sp. gr. of the medium until the latter reached 1.24, but drops with further reduction in sp. gr. The ash content drops rapidly with the sp. gr. The change in coking properties is rather striking, the heavier fractions being chocking, with a steady increase in coking at lower gravity.  
W. M. Sterube, g

AMMOSOV, I.I.

USSR/Engineering - Luminescent Analysis Mar 51

"Application of the Luminescent Method for the Characteristic of Coal Properties," I. I. Ammosov, N. I. Babinkova, Inst of Mineral Fuels, Acad Sci USSR

"Iz Ak Nauk SSR, Otdel Tekh Nauk" No 3, pp 341-349

Luminescence of bitumens in various coals investigated and new method suggested for evaluating properties of coals. Despite low contents, bitumens may characterize properties of whole coal, since during coal formation change in content and composition of bitumens is in close relation to change in content

190749

USSR/Engineering - Luminescent Analysis Mar 51 (Contd)

and composition of organic matter in coal. Therefore, variations in luminescence color of bitumens reflect changes in compn of org constituent. Submitted by Acad N. P. Chizhevskiy.

190749 ✓

AMMOV, I. I.

USSR/Fuels - Coal

Aug 51

"Method for Characterizing the Classification  
Features of Coals," I. I. Ammosov

"Iz Ak Nauk SSSR, Otdel Tekn Nauk" No 8,  
pp 1209-1217

Investigation established that coals, identical in  
respect to metamorphism stages and petrographic  
compn but different as to properties, behave dif-  
ferently during sepn in heavy liquids. This fac-  
tor, indicating dissimilar structure of coal's  
matter, may serve as classification feature dur-  
ing study of coal-formation process. Submitted by  
Acad N. P. Chizhevskiy 6 Jul 50.

205T32

AMMOSOV, I. I.

USSR/Geophysics - Coal

May/June 52

"Basic Causes of Dissimilar Composition and Properties of Mined Coal," I.I. Ammosov

"Iz Ak Nauk, Ser Geolog" No 3, pp 27-38

Analyzing problems of origin of coal and the basic reasons governing their properties, the author concludes that the peculiarities of coals are determined by 5 basic factors.

220756

AMMOSOV, I.I.; MUSYAL, S.A.

Reflecting power as one of the main properties of fossil coals. Doklady  
Akad. Nauk S.S.S.R. 84, 1223-6 '52. (MIRA 5:7)  
(CA 47 no.21:11694 '53)

AMOSOV, I. I.

U S S R .

Geological factors and properties of fossil coals. I. I.

Amosov, I. I. Goryunov, I. I. Goryunov, I. I. Goryunov, I. I.

USSR, 3 (9-10/1954) - Geological factors and properties of fossil coals.

USSR, 3 (9-10/1954) - Geological factors and properties of fossil coals.

AMOSOV, I.I.; ZVYAGIN, B.M.; TODES, O.M.; YUROVSKIY, A.Z.; MARCHENKO,  
M.G., redaktor; TERNIS, I.G., redaktor; POLYAKOVA, T.V., tekhnicheskii redaktor.

[Engineering calculations on the theory of exposing minerals in the process of dressing coal.] Inzhenernye raschety k teorii raskrytiia mineralov v protsesse obogashchenia uglei. Moskva, Izd-vo Akademii nauk SSSR, 1955. 157 p. (MLRA 8:12)  
(Coal preparation)

Сравнение типичных Кузнецкого (Кузнецкий бассейн) и  
Кузнецкого бассейна

principal reasons for the difference is attributed to the  
similarities of metamorphism processes and the resulting  
difference in the vitrain and fusain components.

U. M. Stenaberg

AMMOSOV, I. I.

"Luminescence Microscopic Research on Coal," Proceedings of the International Committee for Coal Petrology No. 2, Brussels 1956. Publisher R. Louis, 81 pp with 92 ill.

This volume contains the reports and discussions of the 2nd Int'l Comm. for Coal Petrology, Liege, Belgium, May 1955

Amos, T. D.

prog up the natural venting in the coal. The vitrain and fusain content had no apparent connection with ejections. The luminescence in boxes varied within wide limits in coals having a pronounced ejection tendency, but were frequently high in such coals. The factors affecting the ejection tend

15-57-3-3462

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,  
pp 143-144 (USSR)

AUTHORS: Ammosov, I. I., Yeregin, I. V.

TITLE: Jointing in the Coals of the Northern Border of the  
Donbass (Donets Basin) (Treshchinovatost' ugley severnoy  
okrainy Donbassa)

PERIODICAL: Tr. In-ta goryuchikh iskopayemykh AN SSSR, 1955, Nr 6,  
pp 103-111

ABSTRACT: Data are given on the investigation of endogenetic and  
exogenetic jointing in coals of different stages of  
metamorphism; long-flame, gas, steam-fat, coking, and  
steam-caking. It was noted that the frequency and  
appearance of endogenetic fractures are not constant  
for coals of the same rank, but vary noticeably. The  
frequency and appearance of exogenetic fractures may  
also vary sharply in coals of the same rank. However,  
there is a systematic relationship between the rank of  
coal and the average amount of the jointing in it. The

Card 1/2

15-57-3-3462

Jointing in the Coals of the Northern Border (Cont.)

author shows that long-flame and gas coals possess the least jointing; steam-fat, coking, and steam-caking coals have maximum jointing. Coals tending to suddenly collapse are characterized by increased endogenetic and, especially, exogenetic jointing.

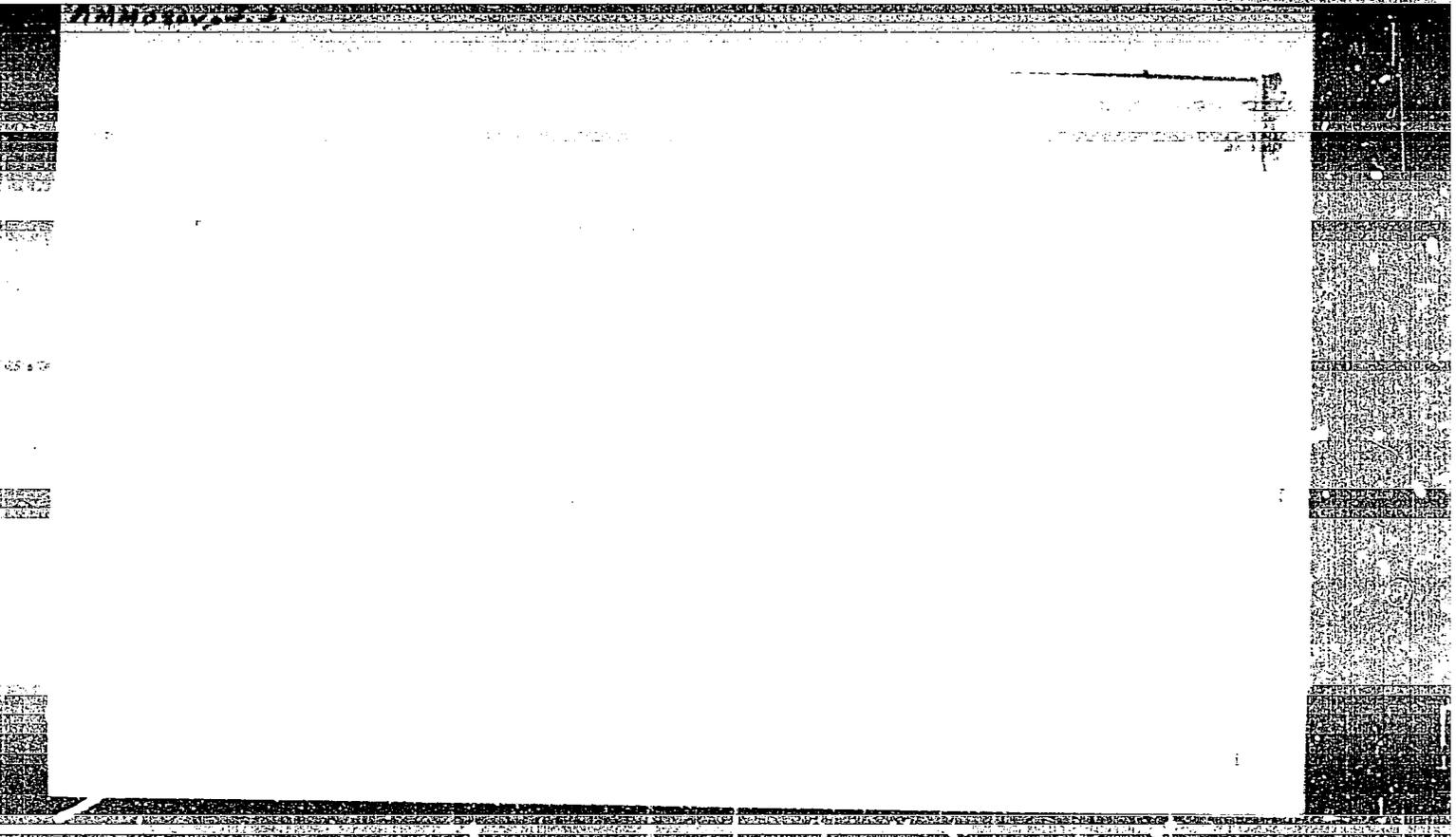
Card 2/2

L. I. B.

AMMOSOV, I. I.

3120

COMPARISON OF MEDICAL METHODS (AMMOSOV, I. I.)



*I. I. Ammosov, D. I.*

Category: USSR

D

Abs Jour: RZh--Kh, No 3, 1957, 7860

Author : Ammosov, I. I.

Inst : Coal Geology Laboratory of the Academy of Sciences USSR

Title : New Methods in the Petrography of Coal (with Reference to the Investigation of the Kuzbas Coal Deposits)

Orig Pub: Tr. Labor. Geol. Uglya. AN SSSR, 1956, No 6, 18-30

Abstract: No abstract.

Card : 1/1

-37-

ARRAMOV, S.K.--- (continued) Card 2.

ZDANOVICH, V.G., prof., doktor tekhn.nauk, red.; IVANOV, G.A., doktor geol.-min.nauk, red.; KARAVAYEV, N.M., red.; KOROTKOV, G.V., kand.geol.-min.nauk, red.; KOROTKOV, M.V., kand.tekhn.nauk, red.; MAKKAVEYEV, A.A., doktor geol.-min.nauk, red.; OMEL'CHENKO, A.N., kand.tekhn.nauk, red.; SEMDERZON, B.M., kand.geol.-min.nauk, red.; USHAKOV, I.N., dots., kand.tekhn.nauk, red.; YABLOKOV, V.S., kand.geol.-min.nauk, red.; KOROLVA, T.I., red.izd-va; KASHALIKINA, Z.I., red.izd-va; PROZOROVSKAYA, F.L., tekhn.red.; NADRINSKAYA, A.A., tekhn.red.

[Mining; an encyclopedia handbook] Gornoe delo; entsiklopedicheskiy apravochnik. Glav. red. A.M.Terpigorev. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po ugol'noi promyshl. Vol.2. [Geology of coal deposits and surveying] Geologiya ugol'nykh mestorozhdenii i marksheiderskoe delo. Redkolegiya toma S.V.Troianskiy. 1957. 646 p. (MIRA 11:5)

1. Chlen-korrespondent AN SSSR (for Karavayev)  
(Coal geology--Dictionaries)

AUTHORS: Ammosov, I.I. and Ammosova, Ya.M.

68-5-2/14

TITLE: An investigation of changes in the microstructure of coals during thermal treatment. (Issledovaniye izmeneniya mikrostruktury ugley pri termicheskom vozdeystvii).

PERIODICAL: "Koks i Khimiya" (Coke and Chemistry), 1957, No.5, pp.9-17 (U.S.S.R.)

ABSTRACT: The character of structural changes and transformations of the components of the vitrinite group during thermal treatment was investigated. Semi-dull and semi-bright petrographic types from Kuznetsk coals of various rank (I<sub>2</sub>, II<sub>2</sub>; III<sub>2</sub> IV<sub>2</sub>; V<sub>2</sub>; VI<sub>2</sub> and VII<sub>2</sub>) and for comparison some coals from the Donets basin were studied. Coal specimens were heated to various temperatures from 250 to 900 - 1100 C. Sections prepared from specimens so obtained were microscopically studied under reflected ordinary and polarised light. In addition, the yield of volatiles at various temperatures and plastic ranges of the coals examined were determined. It was found that on heating, vitrinites of coals from long flame to coking (metamorphic stages I<sub>2</sub> to IV<sub>2</sub>) change their microstructure with the formation of pores. The beginning of changes in the microstructure of coal during heating can be used as an indication of the

Card 1/2

An investigation of changes in the microstructure of coals during thermal treatment. (Cont.) 68-5-2/14

appearance of the plastic state. Three distinct stages in the development of porous structures were observed. It was established that the beginning of changes in the microstructure of vitrinite, changes in the plastic state as well as the period of an intensive evolution of volatiles are different for coals of different rank. Changes in the microstructure taking place on the heating of coals of various rank are illustrated in 19 microphotographs.

There are 5 tables, 19 figures and 16 references, including 12 Slavic.

ASSOCIATION: IGI AN SSSR).

AVAILABLE:

Card 2/2

68-12-3/25

**AUTHORS:** Ammosov, I.I., Doctor of Geological and Mineralogical Sciences  
Yeremin, I.V., Candidate of Technical Sciences,  
Sukhenko, S.I., Candidate of Technical Sciences and  
Oshurkova, L.S.

**TITLE:** Calculation of Blends for Coking on the Basis of the Petrographic Features of Coals (Raschet shikht dlya koksovaniya na osnove petrograficheskikh osobennostey ugley)

**PERIODICAL:** Koks i Khimiya, 1957, No.12, pp. 9-12 (USSR)

**ABSTRACT:** A method of blending coals for coking based on petrographic analysis is proposed. The method is based on principles developed in earlier work (Ref.1). On the basis of rank and petrographic composition, some new characteristics of coals were established, namely: leaning index and coking coefficient. The leaning index is the ratio between the amount of leaning components present in a blend to the amount of leaning components necessary for a given blend to obtain optimum ratio between cokable and inert components in the blend. Vitrite, leptinite and 1/3 of semi-vitrite are included as cokable components and fusite group and 2/3 of semi-vitrite as inert components. The sum of cokable and inert components equals 100% of the organic part of coal ( $\sum C + \sum I = 100\%$ ); the division of coals according to rank (position in metamorphic

Card 1/4

68-12-3/25

Calculation of Blends for Coking on the Basis of the Petrographic Features of Coals.

series) based on reflectivity is shown in Fig.1. Optimum ratio between cokable and inert components for coals of various ranks, determined empirically is shown in Fig.1 (the method of determination is not stated). The amount of leaning components which should be introduced into a blend in order to obtain coke ( $\sum I'$ ) is determined from the formula:

$$\sum I' = \frac{\sum C_1}{a_1} + \frac{\sum C_2}{a_2} + \dots + \frac{\sum C_n}{a_n}$$

where  $\sum C_1$ ,  $\sum C_2$ , .....  $\sum C_n$  the sum of cokable components of coals of individual ranks constituting the blend,  $a_1$ ,  $a_2$  ....  $a_n$  - optimum ratio between leaning components for corresponding coal ranks. The coking coefficient, characterising cokable components is determined from the formula:

Card 2/4

68-12-3/25  
Calculation of Blends for Coking on the Basis of the Petrographic  
Features of Coals.

$$K = \frac{\sum c_1 \cdot K_1 + \sum c_2 \cdot K_2 + \dots + \sum c_n \cdot K_n}{\sum_1^n c}$$

where  $K_1, K_2, \dots, K_n$  - coking coefficient of corresponding ranks at a given content of leaning components in the blend. Values for  $K$  are given in fig.2. From the leaning index and coking coefficient determined for a given blend, the corresponding coke strength can be determined from the diagram (Fig.3). An example of such calculations is given. It is stated that a very good agreement between the calculated and determined values for coke strength was obtained (correlation coefficient determined for 44 cases was 0.827). It is pointed out that maximum fissuring of coke is obtained when the individual components of a coal blend differ considerably in their rank. It is concluded that the method proposed can be used for calculating the required composition of multi-component blends containing fusenic coals and up to 25% of

Card 3/4

68-12-3/25

Calculation of Blends for Coking on the Basis of the Petrographic  
Features of Coals.

gas coals. There are 3 figures, 2 tables and 3 Slavic  
references.

ASSOCIATIONS: IGI AN SSSR and Kuznetsk Metallurgical Combine  
(Kuznetskiy metallurgicheskiy kombinat)

AVAILABLE: Library of Congress

Card 4/4

SOV/24-58-11-37/42

**AUTHORS:** Ammosov, I. I. and Musyal, S. A. (Moscow)

**TITLE:** Variation of the Micro-hardness of Coals Depending on Their Origin (Izmeneniye mikrotverdosti ugley v zavisimosti ot ikh proiskhozhdeniya)

**PERIODICAL:** Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 11, pp 136-138 (USSR)

**ABSTRACT:** The authors describe the results of detailed investigations of the changes in the micro-hardness of the graphic components of a wide range of coals of various Soviet origins. Measurement of the micro-hardness was effected by means of the FMT-5<sup>attachment</sup> with an indenter load of 10 g. The experiments were carried out in reflected light with specimens taken from the middle of the seams and produced from coal which was fragmented to 1.5 mm grains. There are 2 figures and 5 references, 4 of which are Soviet, 1 German.

**ASSOCIATION:** Institut goryuchikh iskopayemykh AN SSSR (Institute of Mineral Fuels, Ac.Sc. USSR)

**SUBMITTED:** April 8, 1958

Card1/1

SOV/24-58-12-27/27

AUTHORS: Ammosov, I.I.  
Babinkova, N.I. (Moscow)

TITLE: Foundations of an Industrial-Genetic Classification  
of Brown Coal (Osnovy promyshlennno-geneticheskoy  
klassifikatsii burykh ugley)

PERIODICAL: Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh  
Nauk, 1958, Nr 12, pp 151-153 (USSR)

ABSTRACT: The results are described of petrographic investigations  
of brown coals from a large number of deposits in various  
stages of geological development which can be used as  
a basis of a classification system. These investigations  
were supplemented by calculating the content of  
petrographic micro-components in coal of average samples  
in definite stages of epigenesis and diagenesis of coal  
on the basis of its reflectivity. Sub-division of the  
coal into micro-components was carried out in  
accordance with the resolution of the All Union  
Conference of Coal Petrographers. The obtained  
petrographic data enabled classifying dense brown coal  
from 28 different origins into four petrographic types  
based on the contents of vitrinite, semi-vitrinite

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Foundations of an Industrial-Genetic Classification of Brown Coal and fusinite (Table 1), type I containing 75%, type II 55%, type III 40% vitrinite whilst type IV contains mainly fusinite (89%). A new system of classification (Table 2) is proposed for brown coals based on their stages of epigenesis, diagenesis, petrographic composition and ash content. These parameters are associated with the genesis of brown coals and therefore, they permit conclusions on various natural properties of brown coal both as a chemical raw material and as a fuel. There are 2 tables and 2 Soviet references.

ASSOCIATION: Institut goryuchikh i skopayemykh AN SSSR  
(Institute for Mineral Fuels, Ac. Sc. USSR)

SUBMITTED: 8th April 1958.

Card 2/2

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A M Mosov, I. I.

11(7) PAGE 1 BOOK REPRODUCTION 001/0996

Академия наук СССР. Институт горючих ископаемых  
Genesis Iverykh gorychikh iskopayemykh (Genesis of Solid Fuels) Moscow, M  
1959, 358 p. Errata ally inserted. 2,000 copies printed.  
Sponsoring Agency: Vsesoyuznoye Nauchnoissledovatel'skoye tsentr. S. I. Mendeleevskoye  
Naukovoye otdeleniye.

Resp. Ed.: K. M. Koryunov, Corresponding Member, USSR Academy of Sciences, and  
I. G. Sidor, Doctor of Chemical Sciences, Ed. of Publishing House A. S.  
Mashinostroyeniye, Tech. Ed.: L. P. Kuznetsov.

FOREWORD: This collection of articles is intended for geochimists, geologists,  
and other specialists interested in the genesis of solid mineral fuels.

CONTENTS: The collection of papers on the genesis of solid mineral fuels has  
been prepared for presentation at the 2nd All-Union Conference on this subject.  
The formation of basic acids and past from the decomposition of microorganisms  
and plants is discussed in connection with studies on the origin of hard coal  
and brown coal, and on the role of certain mineral components in the coal-  
forming process. The chemical composition of peat and the organic matter of  
shales are analyzed as are the brown coal of the Barents-White Sea oil  
fields. The role of microorganisms in the formation of the kerogen and the  
metamorphism and carbonization of coal found in different parts of the Ural  
and the Uralsian Mts are also discussed. The transformation of parent  
matter into combustible minerals is analyzed. References accompany individual  
articles.

Издательство АН СССР, Ленинградский филиал  
Fondas, A. S. On the Question of the Origin of Baltic Substrate Oil  
Shales 69

Koryunov, K. M., and I. A. Yilman. Ligite and Inctite: Stages of Coal  
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Chernousov, Ya. M. Irregular Carbonization of Norovsk Coal Found on  
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Klumbay, Y. Y. Conditions of Formation of Slightly Carbonized Coal  
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Kuznetsov, A. A. Metamorphism of Brown Coal From Barypoyetrovskoye and  
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of the Dubovskoye During Metamorphism 198

Kaluzhnik, V. I. Genesis of Parawax Coal at Tyre 201

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cerning the Coal-Forming Process 207

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Matter Into Present Combustible Minerals and the Composition of These  
Characteristics With the Principal Properties of Combustible Minerals 209

Amosov, I. I. Genesis Features of the Coal Substances as Ascertained by  
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Brown Coal and Changes During Metamorphism 240

Rubtsovskiy, E. A. Changes in the Structure and Properties of Basic  
Acids During the Coal-Forming Process 249

Stov, E. G. Role of Mineral Elements in the Coal-Forming Process 258

Kudachik, V. S., A. I. Rubtsovskiy, and A. E. Turvovskiy. Genesis of  
Organic Sulphur Compounds Contained in Coal 264

SOV/65-59-7-4/12

AUTHORS: Ammosov, I.I., and Babinkova, N.I.

TITLE: Classification of Brown Coals by Petrographic Features  
(Klassifikatsiya burykh ugley po petrograficheskim osobennostyam)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 7,  
pp 14-19 (USSR)

ABSTRACT: The authors have carried out an extensive petrographic investigation of many Soviet brown coals of different geological periods. They calculated simultaneously the micro-components contents in average stratum coal samples and determined the stages of epigenesis and diagenesis from the reflecting power. The subdivision into micro-components was carried out according to the decisions of the All-Union Conference of Petrographers. The usefulness of average stratum samples was established and four classes of coal (Tables 1 and 2) with distinctive petrographic compositions were found. On reflecting power the brown coals were divided into four stages of epigenesis and one of diagenesis not directly related to their geological age. With a complicated petrographic composition chemical factors do not determine

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Classification of Brown Coals by Petrographic Features

the stages of diagenesis or epigenesis, since they depend on non-uniform petrographic composition. The proposed classification (Fig 2) is based on these stages, the petrographic composition and the ash content.

Card 2/2 There are 2 figures, 5 tables and 4 references, 2 of which are Soviet, 1 English and 1 German.

ASSOCIATION: IGI

AMMOSON, I.I.

New investigation methods for detecting potential resources of  
coking coals. Trudy IGI 8:3-13 '59. (MIRA 13:1)  
(Coal)

AMOSOV, I.I.; SUKHENKO, S.I.; YEREMIN, I.V.; OSHURKOVA, L.S.

Calculating coke charges on the basis of the petrographic characteristics of coals, Trudy IGI 8:21-30 '59.

(Coke industry) (Coal)

(MIRA 13:1)

KHARITONOV, G.V.; AMMOV, I.I.; NAZAROVA, N.I.

Relation between the petrographic and chemical composition and the  
chemical and technological properties of coals of the Tuyuk deposit  
in the Uzen Basin. Trudy IGI 8:45-50 '59. (MIRA 13:1)  
(Uzen Basin--Coal)

AMHOSOV, I.I.; NAZAROV, N.I.; KHARITONOV, G.V.; PURIKOVA, V.F.

Chemical composition and properties of the petrographic micro-  
components of coals. Trudy IGI 8:51-65 '59. (MIRA 13:1)  
(Coal)

AMMOSON, I.I.; AMMOSONA, Ya.M.

Changes in the microstructure of coals due to the effect of heat.  
Trudy IGI 8:66-68 '59. (MIRA 13:1)  
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LOSEV, B.I.; AMOSOV, I.I.; MEL'NIKOVA, A.N.; AMMOVA, Ya.M.; CHIBISOVA, K.I.;  
CHERNIKH, V.I.

Use of ultrasonic waves in coal bromination. Trudy IGI 8:131-141  
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(MIRA 13:1)

(Ultrasonic waves--Industrial application)  
(Coal--Analysis)

AMMOV, Innokentiy Ivanovich; YEREMIN, Iven Vasil'yevich; BANKVITSER,  
A.L., red.izd-va; BRUZGULS, V.V., tekhn.red.

[Fracturing of coals] Treshchinovatost' uglei. Moskva, Izd-vo  
Akad.nauk SSSR, 1960. 108 p. (MIRA 13:12)  
(Coal geology)

KALMYKOV, G.S.; AMOSOV, I.I., otv.red.; PEVZNER, G.Ye., red.isd-va;  
KOLKOL'NIKOV, K.A., tekhn.red.

[Petrographic composition and metamorphism of Kizel Basin  
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(Kizel Basin--Coal) (Mineralogy, Determinative)

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Determining the degree of oxidation and estimating the quality of  
the coal by petrographic indications. Trudy IGI 14:3-20 '60.

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AMOSOV, I.I.; PRYANISHNIKOV, V.K.

Using petrographic features to determine the enrichment of coals. Razved. i okh. nedr 26 no.7:10-14 JI '60. (MIRA 15:7)

1. Institut geologii i razrabotki goryuchikh iskopaemykh AN SSSR.

(Coal--Analysis)  
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AMMOV, Innokentiy Ivdovich; TAN SYU-I [T'ang Hsiu-i]; BANKVITSER,  
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[Kansk-Achinsk coal basin; geology and coal potential] Kansko-Achinskii ugol'nyi bassein; geologicheskoe stroenie i uglenosnost'. Moskva, Izd-vo Akad. nauk SSSR, 1961. 137 p. (MIRA 14:11)  
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Alteration stages of sedimentary rock and the paragenetic relationships of mineral fuels. Sov. geol. 4 no.4:7-24 Ap '61.

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1. Institut geologii i razrabotki goryuchikh iskopayemykh  
AN SSSR.

(Coal geology) (Petroleum geology)  
(Rocks, Sedimentary)

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Characterization of coals according to the content of basic groups  
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(Coal) (Coke)

TEODOROVICH, Georgiy Ivanovich; SOKOLOVA, Natal'ya Nikolayevna;  
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AMMOISOV, I. I.

Alteration stages of sedimentary rocks and paragenetic relations of combustible minerals. Analele geol geogr 16 no.1:18-38 Ja-Mr '62.

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AMOSOV, I.I.; PRYANISHNIKOV, V.K.

Estimation of the difficulty of preparing coals in prospecting operations. Razved. i okhr. nedr 28 no.10:12-16 0 '62.

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Petrographic composition of coals in the U.S.S.R. and some of  
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